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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/023,617

DATE: 01/15/2002

TIME: 18:02:44

Input Set : A:\10448-123001.TXT

Output Set: N:\CRF3\01152002\J023617.raw

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| | | <110> | APPLI | | | | , Ra | ijase | ekhai | 2 | | | | | | | | a | ŧ |
| | 5 | ~1.20× | Meyer: | | | | . 59 | 5562 | מוא ג | 2161 | 7 P | MOVET | . ипм | ran i | ₽₽∩ͲϜ | ETNS | | | |
| | 8 | <120 > | AND M | | | | | | | 2101 | .,, | NO V LI | HOL | MIN . | | 11110 | | | |
| | _ | <130> | FILE | | | | | | | | | | | | | | | | |
| ~\(\st\) | | | CURRE | | | | | | | 5/10/ | /023 | ,617 | | | | | | | |
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| | | | PRIOR | | | | | | | 256,2 | 249 | | | | | | | | |
| | | | PRIOR | | | | | | | • | | | | | | | | | |
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| | | | PRIOR | | | | | | 2-18 | | | | | | | | | | |
| | | | NUMBE | | | | | | 3 | 37 | | 4 0 | | | | | | | |
| | | | SOFTW | | | SEQ | ior | wind | iows | vers | sion | 4.0 | | | | | | | |
| | | | SEQ I | | | | | | | | | | | | | | | | |
| | | | TYPE: | | 24 | | | | | | | | | | | | | | |
| | | | ORGAN | | Homo | sap | iens | 3 | | | | | | | | | | | |
| | | | FEATU | | 1101110 | , Dur | | | | | | | | | | | | | |
| | | | NAME/ | | CDS | | | | | | | | | | | | | | |
| | | | LOCAT | | |) | (136 | 51) | | | | | | | | | | | |
| | | | SEQUE | | | | | | | | | | | | | | | | |
| | | | taact | | | | | | | | | | | | | | | 60 | |
| | | | cgggc | | | | | | | | | | | | | | | 120 | |
| | 35 | ccggg | gccac | agcgc | cgag | ic cc | gggo | eggga | ı gto | gccc | ccgc | gcag | gcag | igg i | agcg | gegee | _ | 180 240 | |
| | 36 | cgcac | tccaa | cccgg | cggg | ge ac | CTC | 19999 | g cgg | ggcgc | 2999 | gege | tagec | Tag : | taga | raaaa | - | 300 | |
| | 3/ | CCTCT | gtgac . gcact . | aagcg | lecec | g ga | geeg | gggag | y ccc | ttoor | Lgcc ra at | yyyc ta aa | c at | ים מי | ta ai | ra da | | 356 | |
| | 39 | egeag | geact | gggct | .cg cg | ic gg | ggcc | ccg | 9 909 | Logo | | | | | | al Gl | _ | ,,,, | |
| | 40 | | | | | | | | | | | 1 | | | | 5 | | | |
| | | ttc t | tc gtg | qtc | act | ttc | aaa | gtg | ctc | tgg | gcg | ttc | gtg | ctg | gcc | gcg | 4 | 04 | |
| | | | he Val | | | | | | | | | | | | | | | | |
| | 44 | | | 10 | | | | | 15 | | | | | 20 | | | | | |
| | 46 | gcg c | gc tgg | ctg | gtg | cgg | ccc | aag | gag | aag | agc | gtg | gcg | ggc | cag | gtg | 4 | 52 | |
| | | Ala A | rg Trp | Leu | Val | Arg | Pro | | Glu | Lys | Ser | Val | | GTA | GIn | Val | | | |
| | 48 | | 25 | | | | | 30 | | ~+~ | ~~~ | ~~~ | 35 | ++0 | ~~~ | ata | c | 500 | |
| | 50 | tgc c | tc atc eu Ile | acc ™h~ | ggc | gec (| ggc | agc | ggc Clv | Lou | 990 61v | Ara | T.OII | Dhe | ycy Δ1a | Len | - | ,00 | |
| | 52 | | eu 11e 40 | 1111 | GIY | AIA ' | 45 | Ser | СТУ | пец | СТУ | 50 | ьси | 1 110 | 211.4 | Dea | | | |
| | | | tc gcc | caa | cat | caa (| | ct.a | cta | ata | cta | | gac | atc | aac | acq | 5 | 48 | |
| | | | he Ala | | | | | | | | | | | | | | | | |
| | 56 | 55 | | , | , | 60 | | | | | 65 | - | - | | | 70 | | | |
| | 58 | caa a | gc aac | gag | gag | acg | gct | ggc | atg | gtg | cgc | cac | atc | tac | cgc | gac | 5 | 96 | |
| | | | er Asn | | | | | | | | | | | | Arg | | | | |
| | 60 | | | | 75 | | | | | 80 | | | | | 85 | | _ | | |
| | 62 | ctg g | ag gcg | gcc | gac | gcc | gct | gcg | ctg | caa | gct | ggg | aat | ggt | gag | gaa | ϵ | 44 | |
| | | Leu G | lu Ala | | Asp | Ala | Ala | Ala | | GIn | Ala | Gly | Asn | | GLu | GLU | | | |
| | 64 | | | 90 | | | | | 95 | | | | | 100 | | | | | |

RAW SEQUENCE LISTING DATE: 01/15/2002 PATENT APPLICATION: US/10/023,617 TIME: 18:02:44

Input Set : A:\10448-123001.TXT

Output Set: N:\CRF3\01152002\J023617.raw

| 66 gaa att ctg ccc cac tgt aac ttg cag gtt ttt acc tac acc tgt gac | 692 |
|---|--|
| 67 Glu Ile Leu Pro His Cys Asn Leu Gln Val Phe Thr Tyr Thr Cys Asp | |
| 68 105 110 115 | |
| 70 gtg ggg aag agg gag aac gtc tac ctg acg gct gaa aga gtc cgc aag | 740 |
| 71 Val Gly Lys Arg Glu Asn Val Tyr Leu Thr Ala Glu Arg Val Arg Lys | |
| 100 | |
| /2 120 | 788 |
| 74 gag gtt ggc gaa gtc tca gtc ctg gtc aat aat gct ggt gtg gtc tct | 700 |
| 75 Glu Val Gly Glu Val Ser Val Leu Val Asn Asn Ala Gly Val Val Ser | |
| 76 135 140 145 150 | |
| 78 ggg cat cac ctt ctg gaa tgt cct gat gag ctc att gag aga acc atg | 836 |
| 79 Gly His His Leu Leu Glu Cys Pro Asp Glu Leu Ile Glu Arg Thr Met | |
| 80 155 160 165 | |
| 82 atg gtc aat tgc cat gca cac ttc tgg acc act aag gct ttt ctt cct | 884 |
| 83 Met Val Asn Cys His Ala His Phe Trp Thr Lys Ala Phe Leu Pro | |
| 100 | |
| 04 170 | 932 |
| 86 acg atg ctg gag att aat cat ggt cat att gtg aca gtt gca agt tcc | 934 |
| 87 Thr Met Leu Glu Ile Asn His Gly His Ile Val Thr Val Ala Ser Ser | |
| 88 185 190 195 | |
| 90 ttg gga ttg ttc agt act gcc gga gtt gag gat tac tgt gcc agt aaa | 980 |
| 91 Leu Gly Leu Phe Ser Thr Ala Gly Val Glu Asp Tyr Cys Ala Ser Lys | |
| 92 200 205 210 | |
| 94 ttt gga gtt gtg ggt ttt cat gaa tcc ctg agc cat gaa cta aag gct | 1028 |
| 95 Phe Gly Val Val Gly Phe His Glu Ser Leu Ser His Glu Leu Lys Ala | |
| | |
| 30 213 | 1076 |
| 98 gct gaa aag gat gga att aaa aca acc ttg gtt tgc cct tat ctt gta | 1070 |
| 99 Ala Glu Lys Asp Gly Ile Lys Thr Thr Leu Val Cys Pro Tyr Leu Val | |
| 100 235 240 245 | |
| | |
| 102 gac act ggc atg ttc aga ggc tgc cga atc agg aaa gaa att gag cct | 1124 |
| 102 gac act ggc atg ttc aga ggc tgc cga atc agg aaa gaa att gag cct 103 Asp Thr Gly Met Phe Arg Gly Cys Arg Ile Arg Lys Glu Ile Glu Pro | 1124 |
| 103 Asp Thr Gly Met Phe Arg Gly Cys Arg Ile Arg Lys Glu Ile Glu Pro | 1124 |
| 103 Asp Thr Gly Met Phe Arg Gly Cys Arg Ile Arg Lys Glu Ile Glu Pro 104 250 255 260 | 1124 |
| 103 Asp Thr Gly Met Phe Arg Gly Cys Arg Ile Arg Lys Glu Ile Glu Pro 104 250 255 260 106 ttt ctg cca cct ctg aag cct gat tac tgt gtg aag cag gcc atg aag | |
| 103 Asp Thr Gly Met Phe Arg Gly Cys Arg Ile Arg Lys Glu Ile Glu Pro 104 250 255 260 106 ttt ctg cca cct ctg aag cct gat tac tgt gtg aag cag gcc atg aag 107 Phe Leu Pro Pro Leu Lys Pro Asp Tyr Cys Val Lys Gln Ala Met Lys | |
| 103 Asp Thr Gly Met Phe Arg Gly Cys Arg Ile Arg Lys Glu Ile Glu Pro 104 250 255 260 106 ttt ctg cca cct ctg aag cct gat tac tgt gtg aag cag gcc atg aag 107 Phe Leu Pro Pro Leu Lys Pro Asp Tyr Cys Val Lys Gln Ala Met Lys 108 265 270 275 | 1172 |
| 103 Asp Thr Gly Met Phe Arg Gly Cys Arg Ile Arg Lys Glu Ile Glu Pro 104 250 255 260 106 ttt ctg cca cct ctg aag cct gat tac tgt gtg aag cag gcc atg aag 107 Phe Leu Pro Pro Leu Lys Pro Asp Tyr Cys Val Lys Gln Ala Met Lys 108 265 270 275 110 gcc atc ctc act gac cag ccc atg atc tgc act ccc cgc ctc atg tac | |
| 103 Asp Thr Gly Met Phe Arg Gly Cys Arg Ile Arg Lys Glu Ile Glu Pro 104 250 255 260 106 ttt ctg cca cct ctg aag cct gat tac tgt gtg aag cag gcc atg aag 107 Phe Leu Pro Pro Leu Lys Pro Asp Tyr Cys Val Lys Gln Ala Met Lys 108 265 270 275 110 gcc atc ctc act gac cag ccc atg atc tgc act ccc cgc ctc atg tac 111 Ala Ile Leu Thr Asp Gln Pro Met Ile Cys Thr Pro Arg Leu Met Tyr | 1172 |
| 103 Asp Thr Gly Met Phe Arg Gly Cys Arg Ile Arg Lys Glu Ile Glu Pro 104 | 1172 |
| 103 Asp Thr Gly Met Phe Arg Gly Cys Arg Ile Arg Lys Glu Ile Glu Pro 104 250 255 260 106 ttt ctg cca cct ctg aag cct gat tac tgt gtg aag cag gcc atg aag 107 Phe Leu Pro Pro Leu Lys Pro Asp Tyr Cys Val Lys Gln Ala Met Lys 108 265 270 275 110 gcc atc ctc act gac cag ccc atg atc tgc act ccc cgc ctc atg tac 111 Ala Ile Leu Thr Asp Gln Pro Met Ile Cys Thr Pro Arg Leu Met Tyr 112 280 285 290 114 atc gtg acc ttc atg aag agc atc cta cca ttt gaa gca gtt gtg tgc | 1172 |
| 103 Asp Thr Gly Met Phe Arg Gly Cys Arg Ile Arg Lys Glu Ile Glu Pro 104 | 1172 |
| 103 Asp Thr Gly Met Phe Arg Gly Cys Arg Ile Arg Lys Glu Ile Glu Pro 104 250 255 260 106 ttt ctg cca cct ctg aag cct gat tac tgt gtg aag cag gcc atg aag 107 Phe Leu Pro Pro Leu Lys Pro Asp Tyr Cys Val Lys Gln Ala Met Lys 108 265 270 275 110 gcc atc ctc act gac cag ccc atg atc tgc act ccc cgc ctc atg tac 111 Ala Ile Leu Thr Asp Gln Pro Met Ile Cys Thr Pro Arg Leu Met Tyr 112 280 285 290 114 atc gtg acc ttc atg aag agc atc cta cca ttt gaa gca gtt gtg tgc | 1172 |
| 103 Asp Thr Gly Met Phe Arg Gly Cys Arg Ile Arg Lys Glu Ile Glu Pro 104 | 1172 |
| 103 Asp Thr Gly Met Phe Arg Gly Cys Arg Ile Arg Lys Glu Ile Glu Pro 104 | 1172 1220 1268 |
| 103 Asp Thr Gly Met Phe Arg Gly Cys Arg Ile Arg Lys Glu Ile Glu Pro 104 | 1172 1220 1268 |
| 103 Asp Thr Gly Met Phe Arg Gly Cys Arg Ile Arg Lys Glu Ile Glu Pro 104 | 1172 1220 1268 1316 |
| 103 Asp Thr Gly Met Phe Arg Gly Cys Arg Ile Arg Lys Glu Ile Glu Pro 104 | 1172 1220 1268 |
| 103 Asp Thr Gly Met Phe Arg Gly Cys Arg Ile Arg Lys Glu Ile Glu Pro 104 | 1172 1220 1268 1316 |
| 103 Asp Thr Gly Met Phe Arg Gly Cys Arg Ile Arg Lys Glu Ile Glu Pro 104 | 1172 1220 1268 1316 |
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| 103 Asp Thr Gly Met Phe Arg Gly Cys Arg Ile Arg Lys Glu Ile Glu Pro 104 250 255 260 275 | 1172 1220 1268 1316 1361 1421 1481 1541 |
| 103 Asp Thr Gly Met Phe Arg Gly Cys Arg Ile Arg Lys Glu Ile Glu Pro 104 250 255 260 106 ttt ctg cca cct ctg aag cct gat tac tgt gtg aag cag gcc atg aag 107 Phe Leu Pro Pro Leu Lys Pro Asp Tyr Cys Val Lys Gln Ala Met Lys 108 265 270 275 110 gcc atc ctc act gac cag ccc atg atc tgc act ccc cgc ctc atg tac 111 Ala Ile Leu Thr Asp Gln Pro Met Ile Cys Thr Pro Arg Leu Met Tyr 112 280 285 290 114 atc gtg acc ttc atg aag agc atc cta cca ttt gaa gca gtt gtg tgc 115 Ile Val Thr Phe Met Lys Ser Ile Leu Pro Phe Glu Ala Val Val Cys 116 295 300 305 310 118 atg tat cgg ttc cta gga gcg gac aag tgt atg tac ccc ttt att gct 119 Met Tyr Arg Phe Leu Gly Ala Asp Lys Cys Met Tyr Pro Phe Ile Ala 120 315 320 325 122 caa aga aag caa gcc aca aac aat aat gaa gca aaa aat gga atc 123 Gln Arg Lys Gln Ala Thr Asn Asn Asn Glu Ala Lys Asn Gly Ile 124 330 335 340 126 taagaatctt tttgtatgga atattacttc tatcagaaga tgatcaagat gtttcagtcc 127 agtgcacatc agcattgctg acattttatg gattctaaac ttgtgttgtt tcttttttaa | 1172 1220 1268 1316 1361 1421 1481 |

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| 130 | gtcaaatctg | tagagaagca | gtgtgacatc | ttcaggttac | cattattttt taatgagcag | 1661 |
|-----|--------------|-------------|------------|-------------|-----------------------|------|
| 131 | gaagtctaga | aatgataact | agactgtatg | tttcatgtgt | gtgatttttc agaattccca | 1721 |
| 132 | gagtttactc | attcttqtta | ttaaactcta | gccagttgac | atcttcgcaa tttcaaggac | 1781 |
| 133 | tgatagtgct | gtattttctc | acgttttcta | agtttccgtt | ttgcaaggcc taggtgactt | 1841 |
| 134 | tttcatggtg | tttgtatgtt | tagctctttt | qaaaaqqaat | tttgaaatct ccatcaactg | 1901 |
| 135 | aagtaaatga | tatctgagtg | ttacagtwaa | ggtgaccaag | tctctttctt aaagtcacaa | 1961 |
| 136 | tgactaaagt | attagttgaa | tttttttt | tttttttgat | ggagtctcgc tctgtcacca | 2021 |
| 137 | aactagaata | cagtagcaca | atcacggete | actgcaatct | ctgcctcccr gtttcaagtg | 2081 |
| 139 | attetactat | ctcagcctcc | caagtagetg | ggactacagg | catgcgccac cacgcccagc | 2141 |
| 130 | taattttat | attttagta | gaagaagaag | ttcaccatgt | tggtcaggat ggtctccatc | 2201 |
| 140 | tattasastt | attatagea | taaataaaa | teccasagte | ctgggattac aggcatgagc | 2261 |
| 140 | collyacatt | granteacc | ++++>>+++ | atototoata | tacttcatta agtgtctgga | 2321 |
| 141 | cactgeacec | agectigaat | tastsasttt | totagetate | aattttgctg catacagaaa | 2381 |
| 142 | gacctaatta | tectaaaaga | lcatacattt | cotacctaty | anticipity catacagua | 2441 |
| 143 | gtgccctttc | ctcaggaagt | tgctgtgttt | catttettig | gatggactct tatctagaat | 2501 |
| 144 | acatagcagc | tctgcaaaga | aacagttttt | aaaaatggga | acttctacat tgaaaagtcc | |
| 145 | ccatttttgt | gccaactatg | attagtgaga | ggaagaaatc | ttattctatg gcatatgtat | 2561 |
| 146 | ggaagggtgt | aaagattctt | ttgaaaggtt | tattcacatt | gtagaacagc aaatgacatt | 2621 |
| 147 | tttacagtat | ttttttgtaa | agcaaactat | tttgtgcctt | gaatttggta tatgtgtatt | 2681 |
| 148 | agtgaaacat | tgtaaaggtg | aacttctacc | tctgtatcta | aatgtatacc atccacttgt | 2741 |
| 149 | aaatgactat | aaactattat | gtgattgctt | tttttttag | aatgtcttgt ttaaatagtg | 2801 |
| 150 | gccaatgttt | aaggctgtta | aaataagcca | acttttacta | attggggagt tttataaatg | 2861 |
| 151 | actgattaaa | tttaaagaat | taacttacat | gcaattgtgt | gattattagt tatcagcagt | 2921 |
| 152 | gttgtaagga | aaattattgt | gtttttttt | atgatcatta | tcccacttta ggtaaagaaa | 2981 |
| 153 | aatattggaa | tggaatagtg | ttgggaaaca | gacattaaca | acctagggtg cctgcactca | 3041 |
| 154 | aatagccgat | gttactgtcc | ctagattaga | gacttgatta | agggcttgtt tgtaccaaaa | 3101 |
| 155 | gtggggaaac | aatgccatga | cctatattt | agtttggctg | caccacagat caaatctgca | 3161 |
| 156 | ctgtgtctac | atataggaaa | gatectagta | tgtgctaatg | ttcccaatgc aggacttgag | 3221 |
| 157 | gaagagetet | gttatatgtt | tccatttctc | tttatcaaaq | ataaccaaac cttatggccc | 3281 |
| 158 | ttataacaat | ggagggagtg | actacctett | aattttcaat | catggaccta aagaagtact | 3341 |
| 150 | ctasagaata | tcaacaatgc | canatagaga | cagatatact | cagagattat ccaggtctgc | 3401 |
| 160 | atagaagggce | acctagaata | caggegggga | tectagagaa | atctgttata atttaacaac | 3461 |
| 161 | gazattataa | accttagagea | taaaaaaaat | catattaca | tctaatttta ttcttgtgtg | 3521 |
| 101 | ttataaatta | accetattte | tattttatt | tattattacc | cttataaggg tgtccatctc | 3581 |
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| | <211> LENG | | | | | |
| | ' <212> TYPE | | | | | |
| | <213> ORGA | | sapiens | | | |
| 170 | <400> SEQU | ENCE: 2 | | - | -1 1 - m | |
| 171 | Met Asn Ile | | lu Phe Phe | Val Val Thr | Phe Lys Val Leu Trp | |
| 172 | | 5 | | 10 | _ 15 | |
| 173 | Ala Phe Va | l Leu Ala A | la Ala Arg | Trp Leu Val | Arg Pro Lys Glu Lys | |
| 174 | | 20 | | 25 | 30 | |
| 175 | Ser Val Ala | a Gly Gln V | al Cys Leu | Ile Thr Gly | Ala Gly Ser Gly Leu | |
| 176 | 35 | | 40 | | 45 | |
| 177 | Gly Arg Le | u Phe Ala L | eu Glu Phe | Ala Arg Arg | Arg Ala Leu Leu Val | |
| 178 | 50 | | 55 | | 60 | |
| 179 | Leu Trp As | p Ile Asn T | hr Gln Ser | Asn Glu Glu | Thr Ala Gly Met Val | |
| | 65 | | 0 | 75 | 80 | |
| | | | | | | |

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Output Set: N:\CRF3\01152002\J023617.raw

| | Arg | His | Ile | Tyr | - | Asp | Leu | Glu | Ala | | Asp | Ala | Ala | Ala | Leu | Gln | |
|------------|------|-------|--------|------------|------|-------|--------|------|------------|------|-----|------|------|------------|-------|--------|-----|
| 182 | _ | _ | | | 85 | | _ | _ | | 90 | | | | | 95 | | |
| 183 184 | Ala | Gly | Asn | Gly 100 | Glu | Glu | Glu | Ile | Leu 105 | Pro | His | Cys | Asn | Leu 110 | Gln | Val | |
| | Dho | mb ~ | (Trees | | Cuc | A an | 17 - 1 | C1 | | 7 22 | Clu | λan | Wa I | | T 011 | Thr | |
| 186 | Pne | THE | 115 | THE | Cys | Asp | Val | 120 | гуѕ | Arg | GIU | ASII | 125 | тут | Leu | THE | |
| | Ala | Glu | | Val | Ara | Lvs | Glu | | Glv | Glu | Val | Ser | | Leu | Val | Asn | |
| 188 | | 130 | | | 5 | -1- | 135 | | 1 | | | 140 | | | | | |
| | Asn | Ala | Gly | Val | Val | Ser | Gly | His | His | Leu | Leu | Glu | Cys | Pro | Asp | Glu | |
| | 145 | | - | | | 150 | • | | | | 155 | | - | | - | 160 | |
| 191 | Leu | Ile | Glu | Arq | Thr | Met | Met | Val | Asn | Cys | His | Ala | His | Phe | Trp | Thr | |
| 192 | | | | | 165 | | | | | 170 | | | | | 175 | | |
| 193 | Thr | Lys | Ala | Phe | Leu | Pro | Thr | Met | Leu | Glu | Ile | Asn | His | Gly | His | Ile | |
| 194 | | | | 180 | | | | | 185 | | | | | 190 | | | |
| 195 | Val | Thr | Val | Ala | Ser | Ser | Leu | Gly | Leu | Phe | Ser | Thr | Ala | Gly | Val | Glu | - |
| 196 | | | 195 | | | | | 200 | | | | | 205 | | | | |
| 197 | Asp | Tyr | Cys | Ala | Ser | Lys | Phe | Gly | Val | Val | Gly | Phe | His | Glu | Ser | Leu | • |
| 198 | _ | 210 | _ | | | _ | 215 | _ | | | _ | 220 | | | | | |
| 199 | Ser | His | Glu | Leu | Lys | Ala | Ala | Glu | Lys | Asp | Gly | Ile | Lys | Thr | Thr | Leu | |
| | 225 | | | | _ | 230 | | | _ | _ | 235 | | _ | | | 240 | |
| 201 | Val | Cys | Pro | Tyr | Leu | Val | Asp | Thr | Gly | Met | Phe | Arg | Gly | Cys | Arg | Ile | |
| 202 | | _ | | _ | 245 | | _ | | _ | 250 | | - | | | 255 | | |
| 203 | Arg | Lys | Glu | Ile | Glu | Pro | Phe | Leu | Pro | Pro | Leu | Lys | Pro | Asp | Tyr | Cys | |
| 204 | • | | | 260 | | | | | 265 | | | | | 270 | | | |
| 205 | Val | Lys | Gln | Ala | Met | Lys | Ala | Ile | Leu | Thr | Asp | Gln | Pro | Met | Ile | Cys | |
| 206 | | _ | 275 | | | | | 280 | | | | | 285 | | | | |
| 207 | Thr | Pro | Arg | Leu | Met | Tyr | Ile | Val | Thr | Phe | Met | Lys | Ser | Ile | Leu | Pro | |
| 208 | | 290 | | | | | 295 | | | | | 300 | | | | | |
| 209 | Phe | Glu | Ala | Val | Val | Cys | Met | Tyr | Arg | Phe | Leu | Gly | Ala | Asp | Lys | Cys | |
| 210 | 305 | | | | | 310 | | | | | 315 | | | | | 320 | |
| 211 | Met | Tyr | Pro | Phe | Ile | Ala | Gln | Arg | Lys | Gln | Ala | Thr | Asn | Asn | Asn | Glu | |
| 212 | | | | | 325 | | | | | 330 | | | | | 335 | • | |
| 213 | Ala | Lys | Asn | Gly | Ile | | | | | | | | | | | | |
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| | | | PE: | | | | | | | | | | | | | | |
| 219 | <213 | 3> OF | RGANI | SM: | Homo | sap | piens | 3 | | | | | | | | | • |
| | | | EQUEN | | | | | • | | | | | | | | | |
| | | | | | | | | | | | | | | | | gtgctg | 60 |
| | | | | | | | | | | | | | | | | gcctc | 120 |
| | | | | | | | | | | | | | | | | gtcgg | 180 |
| | | | | | | | | | | | | | | | | ıtggtg | 240 |
| | | | | | | | | | | | | | | | | atggt | 300 |
| | | | | | | | | | | | | | | | | tgggg | 360 |
| | | | | | | | | | | | | | | | | tctca | 420 |
| | | | | | | | | | | | | | | | | gatgag | 480 |
| | | | | | | | | | | | | | | | | ctttt | 540 |
| 231 | cttc | ctac | ga t | gctg | gaga | it ta | atca | tggt | cat | attg | tga | cagt | tgca | ag t | tcct | tggga | 600 |
| | | | | | | | | | | | | | | | | | |

RAW SEQUENCE LISTING

DATE: 01/15/2002 TIME: 18:02:44

PATENT APPLICATION: US/10/023,617

Input Set : A:\10448-123001.TXT

Output Set: N:\CRF3\01152002\J023617.raw

| 232 ttgttcagta ctgccggagt tgaggattac tgtgccagta aatttggagt tgtgggtttt | 660 |
|--|-------|
| 233 catgaatccc tgagccatga actaaaggct gctgaaaagg atggaattaa aacaaccttg | 720 |
| 234 gtttgccctt atcttgtaga cactggcatg ttcagaggct gccgaatcag gaaagaaatt | 780 |
| 235 gagcetttte tgecacetet gaageetgat tactgtgtga ageaggeeat gaaggeeate | 840 |
| 236 ctcactgacc agcccatgat ctgcactccc cgcctcatgt acatcgtgac cttcatgaag | 900 |
| 237 agcatcctac catttgaagc agttgtgtgc atgtatcggt tcctaggagc ggacaagtgt | 960 |
| 23% atgtacccct ttattgctca aagaaagcaa gccacaaaca ataatgaagc aaaaaatgga | 1020 |
| - | 1026 |
| 239 atctaa | |
| 241 <210> SEQ ID NO: 4 | |
| 242 <211> LENGTH: 1327 | |
| 243 <212> TYPE: DNA | |
| 244 <213> ORGANISM: Homo sapiens | |
| 246 <220> FEATURE: | |
| 247 <221> NAME/KEY: CDS | • |
| 248 <222> LOCATION: (367)(1188) | |
| 250 <400> SEQUENCE: 4 | 60 |
| 251 cctgctgcaa tggcttacgg gagccaatgt gacgggatca gggcagaccc atttagggtt | 60 |
| 252 tcgtaaccgg ccaattcagt acgcaatagg gaaaatcaat taggatctgc agagggttcc | 120 |
| 253 cggatacacc ttgcgaagaa tgccgcactc tccgccactc attccccact caccggcacc | 180 |
| 254 cgctaaacct tcagcctgaa attttcctcc gaaggaagca gagcagagga agaactacca | 240 |
| 255 agtgctacac tcaaagcctg ccgtcgcagt gagcgcgacc tccaaactga ggcatttttg | 300 |
| 256 ttccggcgaa atccctccca ctcaggaaag tccctagaaa gagagcgcag gcgcctgggg | 360 |
| 257 tatcac atg acc act tcc cgg aag cgc age aga ccc gct caa ctt cat | 408 |
| Met Thr Thr Ser Arg Lys Arg Ser Arg Pro Ala Gln Leu His | |
| 259 1 5 10 | |
| 261 cct ggg ttg agg cgg agg aga act tcc aga att atg gcg aag tcc ggg | 456 |
| 262 Pro Gly Leu Arg Arg Arg Thr Ser Arg Ile Met Ala Lys Ser Gly | |
| 263 15 20 25 30 | |
| 265 ctg agg cag gac ccg cag agc aca gct gca gcc act gtg cta aag cgg | 504 |
| 266 Leu Arg Gln Asp Pro Gln Ser Thr Ala Ala Ala Thr Val Leu Lys Arg | |
| 267 35 40 45 | |
| 269 gca gta gaa cta gat tog gag tog ogg tat oog oag got otg gtg tgt | 552 |
| 270 Ala Val Glu Leu Asp Ser Glu Ser Arg Tyr Pro Gln Ala Leu Val Cys | |
| 271 50 55 60 | |
| 273 tac caa gag ggg att gat ctg ctc ctg cag gtt ctg aaa ggt acc aaa | 600 |
| 274 Tyr Gln Glu Gly Ile Asp Leu Leu Gln Val Leu Lys Gly Thr Lys | |
| 275 65 70 75 | |
| 277 gat aat act aag aga tgt aat ctc aga gaa aaa att tcc aaa tac atg | 648 |
| 278 Asp Asn Thr Lys Arg Cys Asn Leu Arg Glu Lys Ile Ser Lys Tyr Met | |
| 25 | |
| 279 80 85 90 281 gac aga gcg gaa aac ata aag aag tac ttg gac caa gaa aaa gaa gat | 696 |
| 281 gac aga gcg gaa dac ata dag dag tac ttg gac cad gad dad gad gac 282 Asp Arg Ala Glu Asn Ile Lys Lys Tyr Leu Asp Gln Glu Lys Glu Asp | • • • |
| | |
| 203 93 | 744 |
| 285 gga aaa tat cac aag caa att aaa ata gaa gag aat gca aca ggt ttc | , 11 |
| 286 Gly Lys Tyr His Lys Gln Ile Lys Ile Glu Glu Asn Ala Thr Gly Phe | |
| 20/ | 792 |
| 289 agt tat gag tca ctt ttt cgc gaa tac ctt aat gag aca gtt aca gaa 290 Ser Tyr Glu Ser Leu Phe Arg Glu Tyr Leu Asn Glu Thr Val Thr Glu | 134 |
| 200 Sor Tur Clu Ser Leu Phe Arg Glu Tvr Leu ASB Glu TDT Val TDT Glu | |
| 291 130 135 140 | |

1/15/02

VERIFICATION SUMMARY

DATE: 01/15/2002

PATENT APPLICATION: US/10/023,617

TIME: 18:02:45

Input Set : A:\10448-123001.TXT

Output Set: N:\CRF3\01152002\J023617.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application No

L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date